

varieties, included under these two heads, occur throughout a broad belt of country comprising the upper limits of the tertiary formation, where it is associated with a coarse gravel, ferruginous sand, transported boulders and blocks—constituting what in some systems of geology is termed the *Erratic block groupe*, and which with us is found to rest immediately upon the *primitive* or *primary rocks*. These ores of iron (usually but improperly classed among the *argillaceous oxide of iron*, that belong to another epoch) are found occurring in nodules of an oval or spherical form, sometimes kidney-shaped, and composed of concentric layers. The nodules frequently embrace a nucleus, differing in density and color from the exterior layer. The texture of this exterior layer is compact, but its density diminishes towards the centre, and while its color is commonly dark brown, that of the central portion is light, approaching to yellow. The technological terms applied to these varieties of iron ore are *brown ores* and *hone ores*—names which have reference to their physical characters.

All these ores belong to the mineralogical species, *carbonate of iron*. But when the nodules contain cavities, as they frequently do, these are lined with minute crystals of a rich velvety aspect; which are *hydrated oxide of iron*, a variety of the species *brown oxide of iron*.

They are ranked among the best ores of iron—working easily and yielding an average of metal from forty to fifty per cent. A celebrated deposit of them is in Prince George's county at *Snowden's Mine Bank*, situated on the east side of the Washington Turnpike, near the twenty first mile stone, and about a half mile from the road. The ore was formerly extracted from this bank in a large quantity, as is evident from the excavation—but the mine is now totally abandoned and serves as a mere *lick*, to which the cattle of the neighboring country are attracted by a singular efflorescence within of *sulphate of magnesia*.

At the head of Deep run, which empties into the Patapsco, seven miles from Baltimore, ore of a good quality is raised for the use of the Patapsco furnace. The furnace at Curtis's creek is principally fed with ore of the same nature from its own neighborhood; and in the immediate vicinity of Baltimore, where it occurs in abundance, advantage is taken of the facilities of the Rail Road to convey it to the water side, whence it is exported to New Jersey and there exchanged for bog-ore.

On the Falls of the Little Gunpowder, at Joppa, and